

UiT The Arctic
University of
Norway
Department of
Electrical Engineering

Jobbnorge ID: 240390 Deadline: 5/2/2023

Website: https://uit.no/startsida

Scope: Fulltime

Duration: Permanent

Faculty of Engineering Science and Technology

Professor/Associate Professor in Electrical Engineering at the Arctic Centre for Sustainable Energy

The position

A position as Professor/Associate Professor in Electrical Engineering is available at the <u>Faculty of Engineering Science and Technology</u> (IVT-Fak) at UiT campus Narvik, <u>Department of Electrical Engineering</u>. The position is affiliated with the Research group of Electromechanical Systems. The research activities of the group are aimed at power and energy systems, electronics and communication, as well as advanced control and (coordinated) position control of rotating systems.

Further information about the research group could be found at: Electromechanical systems | UiT

The workplace is at UiT in Narvik. You must be able to start in the position in Narvik within a reasonable time, within 6 months after receiving the offer.

The Arctic Centre for Sustainable Energy (ARC),

UiT The Arctic University of Norway (UiT) established the Arctic Centre for Sustainable Energy (ARC) in 2016. This is an interdisciplinary centre focussing on sustainable energy in the Arctic organized in seven main thematic areas: energy systems, power generation, transportation, carbon capture, advanced materials, digitalization and society and ethics. The centre combines expertise in physics, humanities, chemistry, social sciences, applied mathematics, marine biology, computer science and electrical engineering. The centre permeates the university in its entirety and strengthens research activities at UiT within the scope of the centre. This position is within the Energy systems topic.

The centre is a 110 MNOK initiative by UiT, which finance eight professor positions linked to the seven thematic areas. The applicant should value working in an interdisciplinary environment.

The centre's main objectives are:

- Interdisciplinary R&D excellence within sustainable energy in the Arctic
- To create an internationally competitive and outstanding environment that is an attractive R&D partner for the commercial and public sectors
- To ensure that graduates receive high quality education and expertise within sustainable energy that is relevant for the business and public sector in the north

The focus themes of the centre, seen in an arctic context, are ethical and responsible prosumption of distributed renewable electricity, fuels and thermal energy, and an accountable management of greenhouse gases.

The position's field of research or work

The fundamental objective of ARC at UiT is to accelerate the transition to a sustainable society. ARC is tackling issues related to energy and the synergistic management of greenhouse gases This position is within a broad interpretation of energy systems and the trend of electrification of the society, which includes electricity grids and electric transport, to mention a few. Energy conversion and control using power electronics is often a key enabler for electrification and an important part of energy systems. We encourage interdisciplinary cooperation and seek to combine existing technologies to create new solutions that can be harmoniously integrated into our society and environment.

As an ARC Professor/Associate Professor you will embrace this mission and you will be involved in research and already ongoing projects aimed at realizing sustainable living and the wellbeing of people.

Relevant work tasks might be:

- Contribute to educational activities, lecturing and further development study programs relevant for energy systems.
- Develop offers for practical and continuing education within the field of pertinence and related to ARC
- Developing new and strengthening existing research networks in the field of electrical engineering both at the university and externally

- Initiate and provide funding for new research in the field, and write applications for the Norwegian Research Council and other research funding institutions as well as the industry
- Play a leading role in networking with the industry, locally and nationally, within the field of electrical engineering.

The applicant should lecture at Ph.D. and Master level and should supervise Ph.D. and Master students.

It is expected that the participant will participate in research group collaboration and professional networks nationally and internationally, as well as in disseminating research to a wider public. It is expected that the successful candidate/position holder is willing to develop grant applications (RCN/EU).

Contact

Further information about the position and UiT is available by contacting

Associate Professor Bjarte Hoff, +47 76966318, bjarte.hoff@uit.no or

Head of department Arild Steen +47 7696 6201, arild.steen@uit.no

Qualifications

The ideal candidate has a genuine desire to go a step beyond analysing problems as isolated cases and looks at putting the necessary ingredients together that can provide working solutions in terms of sustainability. In this respect, the energy problem is not seen as a purely technological issue but is also treated in its societal context. We are looking for a candidate with proven expertise in several of the following disciplines:

- · Grid integration of renewable energy
- · Power systems analysis
- Integration of energy storage (mobile and static)
- AC/DC energy conversion and control i.e. power electronics
- · Smart grid and microgrid technologies

You must hold a PhD in Electrical Engineering or related relevant fields and you must document experience in executing independent original research

You must

- Have professorial qualifications in electrical engineering with a focus on renewable energy grid integration, energy conversion, power system analysis and/or smart grids.
- Document substantial qualifications within electrical engineering in general and the thematic areas and refer to publications at international level.
- Have relevant experience outside academia, experience of cooperation between industry and research environments, and experience of academic activities will be emphasized when evaluating applicants.
- Have good communication skills, experience in teaching and research in power engineering in general and the specific topic in particular.

You must be fluent in English, and should have a good command of Norwegian or a Scandinavian language. Applicants who are not fluent in a Scandinavian language must learn Norwegian within 2 years and pass the language exam level B2 ("Bergenstesten") or equivalent.

We will emphasize the applicants motivation for the position and personal suitability.

We are looking for candidates who have:

- · Good collaboration skills
- · Abilities for good communication and interaction with colleagues and students
- Abilities and desires to contribute to a good working environment

Qualification requirements for the position as Professor:

- · Academic level conforming to established international or national standards for position of Professor in the subject area concerned
- Documented pedagogical competence

In addition you must document:

- · Development of the quality of one's own teaching and supervision over time, and
- Broad supervision experience, preferably at master's/PhD level, and
- Participation in the development of educational quality in academic communities

To be awarded a professorship, you must document substantially more extensive research of high quality than that required to be awarded a doctorate degree. You must document academic activity at a high level over the previous six years, and that this points forwards towards continued activity at professorial level.

In addition UiT assess applicants according to national guidelines for assessment of professorial competence, decided by the National Faculty Meeting of STEM-subjects and National Faculty Meeting of MNT. You can find the guidelines here (only in Norwegian).

Qualification requirements for the position as Associate Professor:

- Norwegian doctoral degree in subject area concerned or a corresponding foreign doctoral degree recognised as equivalent to a Norwegian doctoral degree, or competence at a corresponding level documented by academic work of the same scope and quality
- Documented pedagogical competence

At UiT we put emphasis on the quality, relevance and significance of the research work and not on where the work is published, in accordance with the principles of The San Francisco Declaration on Research Assessment (<u>DORA</u>).

UiT wishes to increase the proportion of females in academic positions. In cases where two or more applicants are found to be approximately equally qualified, female applicants will be given priority.

Pedagogical basic competence

All applicants for teaching and research positions shall document their pedagogical competence.

You must have acquired basic competence for teaching and supervision at higher education level. This includes basic skills in planning, conducting, evaluating and developing teaching and guidance.

Those who do not satisfy the requirements may be appointed on a permanent basis on the condition that they satisfy the requirements within two years of appointment.

Documentation requirement

- a) Applicants who have completed education or courses designed to provide teaching competence for teaching at universities and colleges, equivalent to a minimum of 200 hours, must attach diploma and curriculum for the completed course.
- b) Other applicants shall describe, assess and document their competence as a teacher and supervisor. The skills must be documented in the form of a teaching portfolio.

For dosent and professor positions, experience with teaching and supervision in higher education corresponding to three years in a full-time position is required.

For dosent and professor positions, the teaching competence can be developed and documented through a combination of courses and teaching portfolio.

Applicants for dosent and professor positions shall also document that the supplementary criteria are satisfied:

- Description of and reflection over your work involving development of your teaching and supervision. This should be documented with specific examples that demonstrate development over time, as well as a description of and reflection over the process and result
- Description of experience with supervision at master's and PhD level. In addition to describing the scope of the supervision, you shall also summarize your supervision experience and point to possible development areas
- Description of and reflection over your own leadership, participation and role in development of the educational quality in the academic community

If the pedagogical competence can be acquired within two years of appointment, applicants shall not be ranked based on pedagogical competence.

For information about basic pedagogical competence and teaching portfolio, see: https://result.uit.no/om-pedagogisk-mappe/ (Only in Norwegian)

Interim appointment with qualification conditions for position as Associate Professor

If there are no fully qualified applicants for the position, an interim appointment to qualify scientifically may be made for a period of three years. Application for permanent employment with a new assessment shall be applied for within the three year-period. The appointment will become permanent if you are found to be suitably qualified before the three-year period elapses.

We offer

- · R&D sabbatical conditions which are considered some of the best in the country
- A good working environment
- Good welfare arrangements for employees
- Good arrangements for pension, insurance and loans in the Norwegian Public Service Pension Fund

Norwegian health policy aims to ensure that everyone, irrespective of their personal finances and where they live, has access to good health and care services of equal standard. As an employee you will become member of the National Insurance Scheme which also include health care services.

Work- og salary conditions

The successful candidate must be willing to get involved in the ongoing development of their department and the university as a whole.

The allocation of working hours is flexible and allocated on a case-by-case basis. In general, Professor/Associate Professor will spend an equal amount of time on teaching and research and development work. As a norm, the time resources spent on administrative duties constitutes 5 % for academic staff.

The remuneration for Professor is in accordance with the State salary scale code 1013. The remuneration for Associate Professor is in accordance with the State salary scale code 1011. A compulsory contribution of 2 % to the Norwegian Public Service Pension Fund will be deducted. UiT pays directly to the pension fund on top of the salary - in 2023 this rate is 9 %. As a state employee, you have one of the best pension schemes available. For more information see: spk.no.

Inclusion and diversity

UiT The Arctic University in Norway is working actively to promote equality, gender balance and diversity among employees and students, and to create an inclusive and safe working environment.

We believe that inclusion and diversity is a strength and we want employees with different competencies, professional experience, life experience and perspectives.

If you have a disability, a gap in your CV or immigrant background, we encourage you to tick the box for this in your application.

If there are qualified applicants, we invite least one in each group for an interview. If you get the job, we will adapt the working conditions if you need it.

Apart from selecting the right candidates, we will only use the information for anonymous statistics.

Application

The application must include:

- Cover letter including a short description of interests and reasons for applying for the position
- · CV containing a complete overview of experience, professional work and references
- Diplomas, diploma supplements and transcripts (all degrees, in original language and translated)
- · Written references
- · Two references with contact details
- · Documented pedagogical competence
- · A list of your academic production
- Description of your academic production, stating which works you consider most important
- · Academic works, up to ten. The doctoral thesis is regarded as one work.
- · Documentation of English proficiency.

Proficiency in the English language can be documented in the following ways:

- Diploma from a Norwegian upper secondary school with both spoken and written English (140 hours)
- TOEFL (Test of English as a Foreign Language)
- IELTS (International English Testing Service)
- Completed university degree in the field of English language or literature
- One year of completed university studies in Australia, Canada, Ireland, New Zealand, the UK or USA, for which English was the language of instructions.

Documentation has to be in English or a Scandinavian language. The application and submitted documents must be sent electronically via www.jobbnorge.no

Assessment

The applicants will be assessed by an expert committee. The committee's mandate is to undertake an assessment of the applicants' qualifications on the basis of the written material presented by the applicants, and the detailde description draw up for the position.

The applicants who are assessed as best qualified will be called to an interview. The interview shall among other things, aim to clarify the applicants personal suitability for the position and motivations. A trial lecture may also be held.

General information

The appointment is made in accordance with State regulations and guidelines at UiT. At our website, you will find more information for applicants.

More information about moving to Norway and working at UiT: http://uit.no/mobility

According to the Norwegian Freedom and Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

In case of discrepancies between the Norwegian and the English version of this description, the Norwegian version takes precedence.

Eallju - Developing the High North

UiT The Arctic University of Norway is a multi-campus comprehensive university at the international forefront. Our vision is to be a driving force for developing the High North. The Northern Sami notion eallju, which means eagerness to work, sets the tone for this motive power at UiT. Along with students, staff and the wider community, we aim to utilise our location in Northern Norway and Sápmi, our broad and diverse research and study portfolio and interdisciplinary advantage to shape the future.

Our social mission is to provide research-based education of high quality, perform artistic development and carry out research of the highest international quality standards in the entire range from basic to applied. We will convey knowledge about disciplines and contribute to innovation. Our social mission unites UiT across various studies, research fields and large geographical distances. This demands good cooperation with trade and industry and civil society as well as with international partners. We will strengthen knowledge-based and sustainable development at a regional, national and international level.

Academic freedom and scientific and ethical principles form the basis for all UiT's activities. Participation, co-determination, transparency and good processes will provide the decision-making basis we need to make wise and far-sighted priorities. Our students and staff will have the opportunity to develop their abilities and potential. Founded on academic integrity, we will be courageous, committed and generous in close contact with disciplines, people and contemporary developments.

We will demonstrate adaptability and seek good and purposeful utilisation of resources, so we are ready to meet the expectations and opportunities of the future. We will strengthen the quality and impact of our disciplines and core tasks through the following three strategic priority areas.

Additional information

Place of service:

Narvik 8514 Narvik (Narvik Municipality)